

English translation of the amended sheets of International Preliminary  
Examination Report

CLAIMS

1. Ink composition comprising:

- 5       - a binder  
       - one or several dyes and / or pigments, and  
       - a solvent

in which the said solvent comprises at least 10 % by weight - in relation to the total weight of the ink - of  
10 1,3-dioxolane, at least 5 % by weight of one or several other organic compounds that can dissociate the ionisable species in the ink, and less than 5 % water.

2. Ink composition according to claim 1, comprising from 10 to 85 % by weight of dioxolane.

15 *Sub A* → 3. Ink composition according to either of claims 1 or 2, comprising from 5 to 50 % by weight of the said other organic compounds(s).

4. Ink composition according to any of claims 1 to 3, in which the said other organic compound(s) are chosen  
20 from alcohols, ketones, glycol alkylene ethers and esters, dimethyl formamide, N-pyrrolidone and any other compounds known for their ability to dissociate ionisable species and, if appropriate, their properties of dissolving the other ingredients in the ink composition  
25 and / or to slow down the evaporation of the ink; and their mixtures.

5. Ink composition according to claim 4, in which the said other compound(s) are chosen from linear or branched aliphatic alcohols with from 1 to 5 carbon

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atoms, ketones with from 3 to 10 carbon atoms, monoalkylic ethers (in C1 to C6) or dialkyllic (in C1 to C6) glycol akylenes comprising 1 to 10 carbon atoms in the alkylene chain, such as ethylene glycol and propylene glycol, and the esters of these with saturated aliphatic  
5 carboxylic acids with 1 to 6 carbon atoms.

6. Ink composition according to claim 1, in which the said binder comprises one or several resins or polymers.

10 7. Ink composition according to claim 6, in which the said resin(s) and / or polymer(s) are chosen from the methacrylic, vinylic, ketonic, phenolic, cellulosic, styrenic, epoxy, polyurethane and styrene - acrylate resins, and the combination of two or more of these.

15 *Sub A3* 8. ~~Ink composition according to any of claims 1 to 7, comprising 0.1 to 30 % by weight of binder.~~

9. Ink composition according to claim 1, comprising, in addition, one or several plastifiers at a level of 0.1 to 20 % by weight.

20 10. Ink composition according to claim 1, in which the said solvent(s) and / or pigment(s) are chosen from dyes and pigments known as "C. I. Solvent Dyes" and "C. I. Pigments".

*Sub A3* 25 11. ~~Ink composition according to any of claims 1 to 10, comprising 0.1 to 20 % by weight of dye(s) and / or pigment(s).~~

12. Ink composition according to any of claims 1 to 11, comprising, in addition, at least one conductivity salt at a level of 0.1 to 20 % by weight.

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13. Ink composition according to claim 12, in which the said conductivity salt is chosen from alkali metal salts, alkaline earth salts and single or quaternary ammonium salts, in the form of halides, perchlorates, 5 nitrates, thiocyanates, formiates, acetates, sulphates and propionates.

14. Ink composition according to claim 1, comprising, in addition, one or several additives chosen from anti-foaming agents, chemical stabilisers, UV 10 stabilisers, surfactants, inhibitors to prevent salt corrosion, bactericides, fungicides, biocides, and pH buffering agents.

*Sub A4* → 15. ~~Process for marking objects by the projection of ink onto these objects, whereby the projected ink is an ink composition according to any of claims 1 to 14.~~ 45

16. Process according to claim 15, whereby the marking is achieved by the technique of continuous deflected ink jet.